

**CLAIMS**

I claim:

1           1.     A molding machine, comprising:  
2                 two mold carriers defining a mold space therebetween, wherein one of said two  
3     mold carriers is movable relative to the other of said two mold carriers;  
4                 a drive for moving said one of said two mold carriers; and  
5                 a power unit for generating a predetermined closing force between said two mold  
6     carriers when said two mold carriers are moved together, wherein the separate power unit  
7     comprises a pressure cushion filled with a highly viscous composition that has a viscosity greater  
8     than that of hydraulic oil.

1           2.     The molding machine of claim 1, wherein said drive comprises an  
2     electromechanical drive.

1           3.     The molding machine of claim 2, wherein said drive comprises a ball-  
2     rolling spindle drive.

1           4.     The molding machine of claim 2, wherein said drive comprises a hollow-  
2     shafted motor, a spindle and a spindle nut and wherein said hollow-shafted motor is operatively  
3     connected for effecting linear movement of said spindle.

1           5.     The molding machine of claim 1, further comprising a pressure cylinder,  
2     wherein said pressure cylinder and said drive are supported on the same part of said molding  
3     machine, and wherein said pressure cushion is disposed in said pressure cylinder.

1                   6.     The molding machine of claim 5, further comprising an auxiliary piston  
2     arranged for generating the pressure of said pressure cushion, wherein a piston surface of said  
3     auxiliary piston is smaller than a piston surface of said pressure cylinder.

1                   7.     The molding machine of claim 6, further comprising an electromechanical  
2     linear drive operatively arranged for moving said auxiliary piston.

1                   8.     The molding machine of claim 1, wherein said highly viscous composition  
2     comprises grease.

1                   9.     The molding machine of claim 1, wherein said molding machine  
2     comprises an injection molding machine and said mold carriers comprise mold mounting plates.

1                   10.    The molding machine of claim 9, wherein said injection molding machine  
2     comprises a tiebarless injection molding machine and further comprises a C-shaped shackle and  
3     a third plate, wherein said third plate and said other of said two molded carriers are retained at  
4     said C-shaped shackle and wherein said drive for said one of said two mold carriers is supported  
5     on one of said third plate said other of said two mold carriers.